

Remarks

In response to the Office Action mailed July 21, 2011 applicant submits the foregoing amendments and following comments.

Claims 7, 8 and 10 were rejected under 35 USC 101 as directed to a use, without setting forth any steps involved in the process. Claims, 7, 8 and 10 have been cancelled.

Claims 2-5 were rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention. More particularly, claims 2-5 set forth amounts of the compound in terms of weight percentages without specifying to what the percentages relate to. Claims 2-5 have been amended to specify that the weight percentages are with respect to the composition itself.

Claims 7 and 8 were rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention. Claims 7 and 8 have been cancelled.

Claims 7, 8 and 10 were rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention. Claims, 7, 8 and 10 have been cancelled.

Claims 1, 2, 6 and 10 were rejected under 35 USC 102(b) as being anticipated by Fitzgerald US 2003/0220218 (hereinafter Fitzgerald '218). Applicant submits the Fitzgerald '218 fails to anticipate the claims of the application as presently amended.

Fitzgerald '218 discloses a non-flammable ternary liquid cleaner combination including first, second and third solvents. The first solvent is 1,1,1,3,3-pentafluorobutane, the second solvent is trans-1,2-dichloroethylene and the third solvent is 3,3-dichloro-1,1,1,2,2-pentafluoropropane and/or 1,3-dichloro-1,1,2,2,3-pentafluoropropane. The third solvent is identified as imparting low flammability to the cleaner. See paragraph [0015]. Fitzgerald '218 discloses that the solvent combination may be in the form of an aerosol in which a

propellant such as tetrafluoroethane is employed. Applicant submits that Fitzgerald '218 teaches that a third solvent, either 3,3-dichloro-1,1,1,2,2-pentafluoropropane and/or 1,3-dichloro-1,1,2,2,3-pentafluoropropane is necessary in order to reduce the flammability of the combination. Applicant submits that there is no teaching in Fitzgerald '218 that a combination without the third solvent would be nonflammable. Furthermore, applicant submits that Fitzgerald '218 fails to disclose a combination containing 227ea or provide any teaching that a combination of 1,1,1,3,3-pentafluorobutane (365mfc) and trans-1,2-dichloroethylene and 1,1,1,2,3,3,3-heptafluoropropane (227ea) would be non-flammable as discovered by the present inventor. Applicant submits that Fitzgerald '218 fails to disclose each and every feature of the present invention as currently claimed and the rejection should be withdrawn.

Claims 4 and 5 were rejected under 35 USC 103(a) as being unpatentable over Fitzgerald US 2003/0220218 (hereinafter Fitzgerald '218). Applicant submits the Fitzgerald '218 fails to render obvious the claims of the application as presently amended.

Applicant submits that Fitzgerald '218 discloses the use of a third solvent, either 3,3-dichloro-1,1,1,2,2-pentafluoropropane and/or 1,3-dichloro-1,1,2,2,3-pentafluoropropane to reduce the flammability of a mixture of 1,1,1,3,3-pentafluorobutane and trans-1,2-dichloroethylene. The third solvent is identified by Fitzgerald '218 as imparting low flammability to the cleaner. See paragraph [0015]. Fitzgerald '218 fails to provide any teaching that trans-1,2-dichloroethylene impact flammability. Applicant submits that Fitzgerald '218 fails to disclose either expressly or by implication that a combination of 1,1,1,3,3-pentafluorobutane and trans-1,2-dichloroethylene and 1,1,1,2,3,3,3-heptafluoropropane would be non-flammable as discovered by the present inventor. Applicant submits that Fitzgerald '218 fails to render obvious the present invention as currently claimed and the rejection should be withdrawn.

Claims 1-3 and 5-9 were rejected under 35 USC 103(a) as being unpatentable over US 6,080,799 to Kruecke et al. (hereinafter Kruecke et al. '799) in view of US 2004/0132631 to Galaton et al. (hereinafter Galaton et al. '631). Applicant submits that neither Kruecke et al. '799 or Galaton et al. '631 singly or in combination render obvious the present invention as currently claimed.

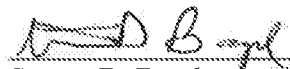
Kruecke et al. '799 discloses a mixture containing 1,1,1,3,3-pentafluorobutane (365mfc) and at least one fluorohydrocarbon selected from 1,1,1,2-tetrafluoroethane (134a), 1,1,1,3,3-pentafluoropropane (245fa), 1,1,1,3,3,3-hexafluoropropane (236eb), and 1,1,1,2,3,3,3-heptafluoropropane (227ea). The mixtures are described as suited for use as foaming gases for a blowing agents. Applicant submits that there is no disclosure in Kruecke et al. '799 of a nonflammable combination that consists of 1,1,1,3,3-pentafluorobutane (365mfc), trans-1,2-dichloroethylene and 1,1,1,2,3,3,3-heptafluoropropane (227ea). Furthermore, Applicant submits that there is no teaching or motivation or suggestion provided in Kruecke et al. '799 to include any other components in the described mixture. Kruecke et al. '799 describes the disclosed mixture as not combustible (column 4, line 15). Thus, there is no suggestion or motivation provided by Kruecke et al. '799 to modify the mixture in order to impact combustibility.

Galaton et al. '631 discloses that addition of trans-1,2-dichloroethylene to hydrofluorocarbons such as 365mfc, 245fa and 134a to enhance fire performance. There is no mention in Galaton et al. '631 of 227ea or of a mixture of 365mfc and 227ea and trans-1,2-dichloroethylene as claimed in the present application. Applicant submits that there is no motivation to combine the teachings Galaton et al '631 and Kruecke et al. '799 and the rejection should be withdrawn.

Applicants submit that in view of the foregoing amendment and remarks, claims 1-3, 5 and 9 are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

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